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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,025	12/31/2001	Rajendran S. Michael	24991A	2298

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OWENS CORNING  
2790 COLUMBUS ROAD  
GRANVILLE, OH 43023

EXAMINER
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BOSS, WENDY L

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 08/18/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/039,025

Applicant(s)

MICHAEL, RAJENDRAN S.

Examiner

Wendy Boss

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

Patent No. 4,267,993 (Shimizu et al.).

Shimizu discloses a vehicle trim panel/radiator element integral unit comprising a multi-layer substrate comprising a core layer and at least one outer layer, the substrate being formed so as to have a first region compressed to a first thickness and a second region having a second thickness which is greater than the first thickness, the first region defining an audio speaker radiator element, the second region being integral with the first region (see Figure 4). It is also disclosed by Shimizu that the integral unit may be a vehicle door interior panel (see column 1, lines 10-12). Shimizu also discloses that the above multi-layer substrate is attached to a first substrate having at least one rib and at least one opening adjacent to the rib (see Figures 6 and 7).

3. Claims 1-6 and 8-21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,447,047 (Marcovecchio et al.).

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Marcovecchio discloses a vehicle trim panel/radiator element integral unit comprising a multi-layer substrate comprising a core layer and at least one outer layer, the substrate being formed so as to have a first region compressed to a first thickness and a second region having a second thickness which is greater than the first thickness, the first region defining an audio speaker radiator element, the second region being integral with the first region (see Figure 4; and column 3, line 62 through column 4, line 2). Marcovecchio further discloses that the substrate core layer comprises at least one of a polymeric foam layer, a polymeric fiber non-woven mat, a mineral fiber non-woven mat, and a mineral fiber/polymeric fiber non-woven mat (see column 3, line 66 through column 4, line 8). It is also disclosed in the reference that the substrate may comprise two outer layers one opposing sides of the core layer (see Figures 1 and 5). The reference also discloses that a second material comprising vinyl or leather may cover a second portion of the second region (see column 4, lines 64-67). The integral unit disclosed in the reference is also a vehicle interior door panel. Marcovecchio also discloses that the above multi-layer substrate is attached to a first substrate having at least one rib and at least one opening adjacent to the rib (see Figures 1 and 5; and column 4, lines 19-25).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 2-11 and 13-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,267,993 (Shimizu et al.) in view of U.S. Patent No. 6,447,047 (Marcovecchio et al.).

Shimizu discloses the integral unit shown above in paragraph number 2. The reference does not disclose what materials are used for the core or the outer layer; however, attention is directed to Marcovecchio, which teaches a similar structure using polymeric core materials and outer layers. It would have been obvious to one having ordinary skill in the art that such materials could be used in the Shimizu structure as well.

Shimizu also does not disclose the size of the first thickness or the second thickness; however, it is within the level of one having ordinary skill in the art to vary the thicknesses, depending of the size of the speaker to be installed and the dimensions of the door panel itself.

6. Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,447,047 (Marcovecchio et al.).

Marcovecchio discloses the integral unit shown above in paragraph number 3. The reference does not disclose the size of the first thickness or the second thickness; however, it is within the level of one having ordinary skill in the art to vary the thicknesses, depending of the size of the speaker to be installed and the dimensions of the door panel itself.

7. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,447,047 (Marcovecchio et al.) in view of U.S. Patent No. 6,247,551 (Heron).

The Marcovecchio reference also does not necessarily disclose that the integral unit includes an electro-mechanical drive device coupled to the audio speaker radiator element; however, attention is directed to column 1, lines 47-51 of Heron, which teaches that

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loudspeakers attached to electro-mechanical drive devices are a conventional in the art. It would have been obvious to one having ordinary skill in the art that any known loudspeaker arrangement could be used in the Marcovecchio panel.

### ***Response to Arguments***

8. Applicant's arguments filed May 27, 2003 have been fully considered but they are not persuasive. The applicant argues that the Shimizu and Marcovecchio references fail to disclose any form of audio speaker radiator element; however, it is the examiner's position that the disclosed speaker and loudspeaker in each of the references are types of audio speaker radiator element, since they are capable of radiating sound. Furthermore, attention is directed to column 3, line 31 of U.S. Patent No. 6,481,173 (Roy et al.), which suggests that "radiator" is synonymous with "speaker". The applicant further argues that the references fail to disclose an audio speaker radiator element formed from a first relatively compressed region of a multi-layer substrate; however, the applicant's claims do not require that the audio speaker radiator element has such a structure, only that the vehicle trim panel/radiator element integral unit does.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after


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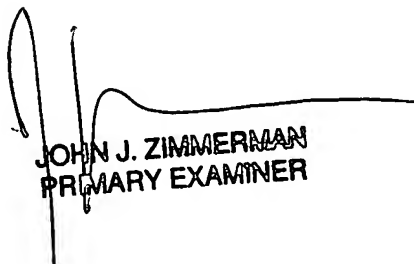
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wendy Boss whose telephone number is 703-306-5922. The examiner can normally be reached on M-Th 8:30a-6:00p; 2nd F 8:30a-5:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 703-308-3822.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Wendy Boss  
August 7, 2003

  
JOHN J. ZIMMERMAN  
PRIMARY EXAMINER